



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

LYON-CAEN, C. and others. *Les lois commerciales de l'univers, recueil comprenant l'ensemble des textes relatifs au droit commercial, avec des références au droit civil, aux lois d'organisation judiciaire et à la procédure.* (Paris: Pichon et Duran-Auzias. 1911. 40 volumes. 45 fr.)

POLLAK, R. *Über das Wirtschaftsproblem der österreichischen Konkursrechtsreform.* (Vienna: Export-Akademie des k. k. österreich. Handelsmuseums. 1911. Pp. 36. .60 m.)

PRINCE, A. *Notre marine marchande et notre commerce extérieur de Paris port de mer.* (Paris: Société des études coloniales et maritimes. 1911. 3.50 fr.)

VIVANTE, C. *Les sociétés commerciales. Traité de droit commercial, Vol. II.* Translated from Italian into French by JEAN ESCARRA. (Paris: M. Giard et E. Brière. 1911. 4 vol. 112 fr.)

The complete work will comprise four volumes, volumes three and four being now in press.

WOLF, J. C. *Die Weinkrisis in Frankreich zu Anfang des 20. Jahrhunderts, ihre Entstehung und Lösung.* (Berlin: P. Parey. 1911. Pp. x, 122. 3.50 m.)

——— *Bibliographie der Handelswissenschaften.* Third Issue, April, 1910, to March, 1911. (Leipzig: C. E. Poeschel. 1911. Pp. 83. .75 m.)

A helpful list of books on commerce and trade, compiled from the reviews of books published in *Zeitschrift für Handelswissenschaft und Handelspraxis*. The titles are entered under topical headings. A few pages give reference to articles in periodicals.

Accounting, Business Methods, Investments and the Exchanges

The Principles of Scientific Management. By FREDERICK W. TAYLOR. (New York: Harper and Brothers. 1911. Pp. 144. \$1.50.)

The Principles of Industrial Management. By JOHN C. DUNCAN. (New York: D. Appleton and Company. 1911. Pp. xviii, 323. \$2.00.)

Scientific Management and Railroads: Being Part of a Brief Submitted to the Interstate Commerce Commission. By LOUIS D. BRANDEIS. New York: The Engineering Magazine. 1911. Pp. 92. \$1.50).

Mr. Taylor's book is a persuasive little volume by the man who has done most to bring into existence the system of scientific shop management. It is written in a friendly, informal style and eluci-

dates the principles laid down by means of illustrations drawn from an experience of 30 years in industrial research and experimentation. The problem attacked is no less than to convert productive industry into applied science by developing a science of management which shall coördinate with the physical sciences. Throughout industry, as it is at present carried on, traditional and haphazard methods are employed by laborers who receive little guidance from their employers. This condition permits "soldiering" which everywhere, under the wage system, is an enormous source of waste. The remedy for this is to create in each establishment a department of research (planning department) which shall not only investigate each element involved in a task, but shall prescribe the best method and shall exact obedience. By this means the most perfect method may be made the standard or generally employed method; the amount of work a first-class man should do in a day can be fixed with certainty; the fittest man for each task may be selected with accuracy; and finally, a fitting bonus above the ordinary wages may be paid to those workmen who co-operate with the management in maintaining the standards thus scientifically set.

The point to which the author gives the most attention is that the best method is one which the individual laborer cannot discover for himself and hence it is the function of the management to discover and apply it. This point is thoroughly proved by a brief description of the author's investigations in time studies and pace-making and in the mechanics of metal cutting. From these descriptions it can easily be seen that the choice of the best method may rest upon years of continuous investigation involving the coöperation of many persons and the use of elaborate records.

There is one point, upon which the interest of the labor unions centers, which is not proven; namely, Does scientific management afford a means for determining the proportion in which the profits, resulting from the introduction of this system, shall be shared between labor and capital? Upon this point Mr. Taylor very interestingly says (p. 138): "The 60 per cent increase in pay which he (the pig-iron handler) received was not the result of an arbitrary judgment of a foreman or superintendent; it was the result of a long series of careful experiments impartially made to determine what compensation is really for the man's true and best interest when all things are considered." These experiments are not described, however.

Professor Duncan presents a diversity of material. Chapters 2, 3, and 4, which treat of the location of industries and individual plants, may fairly be described as commercial geography; chapters 5 and 6, which discuss business integration and specialization, may be called economic morphology; chapters 7, 8, and 9, devoted to descriptions of industrial processes, such as one finds in German works on *Warenkunde*, and American works on industrial chemistry, may perhaps be designated as technique. Of an engineering nature are chapters 10, 11, and 12, devoted to fire precautions, power, and lighting, heating and ventilation of factory buildings. The remainder of the book is occupied with matters which concern administration, or "business system"; chapters 14, 15 and 16 deal with labor; and chapters 17 and 18, with materials.

To confine ourselves to a single criticism, one is disappointed at finding no presentation of the principles of "scientific management." The value of the book would have been considerably increased, for class use, had the chapters on commercial geography and the technique of the physical processes of various selected manufacturing industries been left out, and the space taken to explain the principles governing the accounting, credit, and selling departments of a business, and to present the work of planning departments.

Mr. Brandeis gives us the principles of scientific management by means of brief general statements, each of which is supported by extracts from the testimony of those who appeared before the commission. The question of applying these principles to the railway business is then discussed and, finally, the good results which would follow such an application are pointed out.

In the debate resulting from the introduction of this argument the representatives of the railways have variously stated: that practically all operating economies have already been achieved (*Brandeis*, pp. 1-2); that future economies can only be secured by the use of large sums of money, which cannot be raised so long as legislation threatens railway earnings. (*Ry. and Eng. Rev.*, Dec. 17, 1910); that scientific management can be introduced in the railway business only to a small extent (*Ry. and Eng. Rev.*, Nov. 26, 1910); and, finally, that the denial of the rate advance is a blessing in disguise. This diversity demonstrates that uniformity or standardization of practice, broadly speaking, does not exist in railway management, and that railway executives were caught, by this dis-

cussion, in a state of ignorance as to what "scientific management" is.

A point which is now more in need of honest investigation than further discussion is whether scientific management can be applied to a business like that of the railway, which extends over a great stretch of country and in which some of the units are constantly moving from place to place. On the face of it there seems to be no good reason why "preparedness; separation of planning from performance; analytical study of every operation; and current records of the efficiency of men, equipment and materials" (*Brandeis*, p. 62), should not apply to such a business; but railroad men frequently assume that these principles can only apply to maintenance of equipment (*Ry. and Eng. Rev.*, Nov. 26, 1910).

This assumption has led to some very unfair and futile misstatements of the meaning of Mr. Emerson's calculation that a million dollars a day or \$300,000,000 a year can be saved by American railways out of their operating expenses. For example, *The Railway and Engineering Review* (Nov. 26, 1910) in an editorial endorsed by many railway men, claims "that the total cost of maintenance of equipment, as shown by the reports of the Interstate Commerce Commission, is under \$400,000,000 a year. Out of this, Mr. Brandeis would have the railways save \$365,000,000. In other words, his nostrum would save the entire cost of shop labor and most of that for materials." It would be interesting to know whether this editorial was written after Mr. Emerson gave the testimony which is quoted by Mr. Brandeis on pages 83-88 inclusive, for in that testimony Mr. Emerson, with great care, explained four methods by which he arrived at the figure quoted. The economy of one million dollars per day was calculated by him on the basis of a total expenditure by railways for labor and materials of \$1,667,000,000; in other words, a possible saving of 18-22 per cent was indicated instead of 75-90 per cent.

EDWARD D. JONES.

Ann Arbor, Michigan.

Accounting and Auditing. By WILLIAM MORSE COLE. (Chicago: Cree Publishing Company. 1911. Pp. 479.)

Professor Cole has a happy faculty of crystalizing and rendering clear whatever is vague on the subject of elementary accounts and making the reader sure where before he was doubtful. There